



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/853,891	05/11/2001	Luc Wuidart	S1022/8567	6160

23628 7590 03/31/2004

WOLF GREENFIELD & SACKS, PC
FEDERAL RESERVE PLAZA
600 ATLANTIC AVENUE
BOSTON, MA 02210-2211

EXAMINER

LINNENKAMP, NICHOLAS L

ART UNIT	PAPER NUMBER
----------	--------------

2635

DATE MAILED: 03/31/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/853,891

Applicant(s)

WUIDART, LUC

Examiner

Nicholas L Linnenkamp

Art Unit

2635

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 9 is/are rejected.
- 7) ☒ Claim(s) 3-8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>5, 6, 7, and 8</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

Claim 1 is objected to because of the following informalities: Line 4 of claim 1 contains a typographical error "thereacross". It is also believed that additional information is required to complete the claim as a mere separation of the words "there" and "across" do not clarify how the variables are linked to the voltage. Reference on page 5, line 30 of the specification is made to the at hand subject matter that also includes the same typographical error and inconsistency. Examiner understands that applicant intended the method to include the ability to recognize a transponder in the field of terminal through detection of current and/or voltage in an oscillating circuit. Appropriate correction is required.

Claim 1 is objected to because of the following informalities: the first use of the word "current" fails to delineate whether the applicant intends for the word to represent the flow of electrons or an instantaneous value of the variables. Examiner understands that applicant intended to provide a method where the measured current and voltage would be applied in a "threshold test" indicating the presence of a transponder in the field of the terminal. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 9 is rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a terminal generating an electromagnetic field and cooperating with a transponder when the transponder enters the field, does not reasonably provide enablement for "means for implementing the method of claim 1". The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to build the invention commensurate in scope with these claims.

Examiner raises questions about the pieces of the terminal that applicant feels as critical to the observance of the method described in claim 1 since claim 1 has steps to compare current and voltage in an oscillating circuit and detects the presence of a transponder but does not indicate any components other than an oscillating circuit and means for regulating signal phase in which to perform the required action.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Ekchian et al. (heretofore Ekchian).

Ekchian teaches of a method for controlling an electromagnetic field generation terminal (**transceiver 14**) using a signal for exciting an oscillating circuit, provided with a means for regulating a signal phase (**Phase Locked Loop 54, 56, 58**) in the oscillating circuit (**transceiver 14 contains oscillating circuit as shown in fig 5, characterized by 1 MHz crystal oscillator 50**) comprising:

Comparing the current and/or voltage in an oscillating circuit with predetermined values to detect the presence of a transponder in the electromagnetic field (**Antenna 18 measures the signal strength reflected back towards the transceiver 14. Signal strength is a measure of reflected current and/or voltage. The reader determines number of units based on the reflected signal strength, Col 5 lines 59-64, Col 6 lines 1-56, particularly equation 7. Determining the number of transponders indicates the presence or absence of a transponder in the EM field**).

In reference to claim 9, Ekchian teaches of a terminal for generating an EM field adapted for cooperating with a transponder when said transponder enters the field, including means for implementing the method of claim 1 (**means as shown above in claim 1**)

Thus, Ekchian anticipates claims 1 and 9.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ekchian. Ekchian teaches claim 1 as above. Ekchian does not teach of measuring the predetermined values for comparison during an off-load operation of the terminal when there are no transponders present in the field of the terminal. Ekchian does teach that the absence of a signal indicates that there is no transponder in the field of the terminal **(See Fig 11, where value of signal is zero)**. It is understood that a value of zero does not mean that there is no electromagnetic disturbance at the frequency being monitored in the vicinity of the terminal but that background noise is not considered when deriving value.

It would have been obvious to one skilled in the art at the time of invention to combine the teachings of Ekchian with normalizing for background noise in order to

keep background noise from causing a false reading on the number of transponders in the field of the terminal. Normalization would take into account the background noise by either subtracting the known noise from observed values of signal strength or in applicant's case by creating a threshold in which to overcome.

Thus, Ekchain teaches all the limitations of claim 2.

Allowable Subject Matter

Claim 3-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Prior art of record does not indicate that presence detection is implemented when a demodulator included with the terminal detects no signal by a transponder.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Examiner notes that Document US 2003/0227323 A1 by Enguent teaches of a circuit for demodulating a signal by an electromagnetic transponder, comprising of both

a phase and amplitude demodulator and summing the results provided by the demodulators.

Both of the above documents are in the same endeavor as the instant application and contain relevant information.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicholas L Linnenkamp whose telephone number is (703) 305-8701. The examiner can normally be reached on 8:00-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on (703) 305-4704. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nicholas L Linnenkamp
Examiner
Art Unit 2635

NLL

MICHAEL HORABIK
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

